In the Specification:

In the section entitled "BRIEF DESCRIPTION OF THE DRAWINGS", cancel paragraphs [0037] and [0038], and re-write paragraph [0036] as follows:

[0036] FIG. ~~9A~~ 9 shows ~~the square wave output~~ U1 waveforms at ~~U1A,~~ pin 1 (square wave A), pin 5 (exponential waveform B) and pin 6 (exponential waveform C);

~~[0037] FIG. 9B shows the RC exponential waveforms at pins 5;~~

~~[0038] FIG. 9C shows the RC exponential waveforms at pin 6;~~

In the section entitled "DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS", amend paragraph [0075] as follows:

[0075] An embodiment of the invention comprises a balanced bridge circuit. See FIG. 8A. The component U1A 90 is a comparator (TLC3702 158) configured as an oscillator. The frequency of oscillation of this component, U1A 90, of the circuit may be considered arbitrary and non-critical, as far as the operation of the circuit is concerned. The period of the oscillator is set by the elements C.sub.ref 92, R.sub.hys 94, the trim resistance, R.sub.trim 96, where the trim resistance may be varied and the range resistors R.sub.range 152 are fixed. The resistors Rrange 152 allow limits to be placed on the range of adjustment, resulting in an easier adjustment. The adjustment band is narrowed, since only part of the total resistance there can be varied. Consequently a single potentiometer may be used, simplifying the adjustment of R.sub.trim 96. A value for R.sub.range 152 for the schematic shown in FIG. 8A might be 100 k.OMEGA.. R.sub.trim 96 might have an adjustment range of 10 k.OMEGA. to 50 k.OMEGA.. The output signal at pin 1 98 of component U1A 90 is a square wave, as shown ~~in~~ at line A of FIG. ~~9A~~ 9. C.sub.ref 92 is charged by the output along with ANT 100, both sustaining the oscillation and measuring the capacitance of the adjacent free space. The signals resulting from the charging action are applied to a second comparator, U1B 102, at pin 5 104 and pin 6 106 (FIG. 8A). These signals appear as exponential waveforms, as shown ~~in FIG. 9B and FIG. 9C~~ at lines B and C of FIG. 9.